Walrus Questions and Answers

To submit a formal question to the Walrus Program Office, please send it by email to the contracting officer (Mr. Charles Nurse, cnurse@darpa.mil) with a copy to Mr. Justin Hayes (jhayes@snap.org).

Questions that Modify the Solicitation

- Q1: The evaluation criteria specify key personnel in section 4.1.2.1, while in the proposal guidance (Appendix I) key personnel and program team is describe more generally. Is the list in §4.1.2.1 prescriptive?
- A: The list is not prescriptive. Key personnel and their qualifications for the performance of the program should be given. The number and roles of the individuals the offeror believes to be key personnel is left to the offeror to decide.
- Q2: Section AI.2.3.3 asks for cost call outs for Phase II, should this be for Phase I?
- A: The solicitation has been changed to correct this. It now reads:

<u>Labor</u>: Total labor includes direct labor and all indirect expenses associated with labor, to be used for the Phase I period of performance. Provide a breakdown of labor hours and rates for each category of personnel to be used on this project.

<u>Direct Materials</u>: A by item/unit cost breakdown of the total direct material that will be acquired and/or consumed in the Phase I period of performance. Limit this information to only major items of material (>\$1,000) and how the estimated expense was derived.

<u>Subcontracts</u>: Describe major efforts to be subcontracted, the source, estimated cost and the basis for this estimate. A summary cost breakdown should be provided for each subcontract proposed.

<u>Consultants:</u> Any proposed use of an individual not directly employed by the Offeror resulting in a cumulative Phase I cost of \$10,000 or more should be detailed. The individual should be identified by name and affiliation, as well as his/her hourly rate, total number on labor hours, and any other direct costs such as materials or travel that are not accounted for elsewhere in the cost proposal.

<u>Travel</u>: Total proposed travel expenditures relating to the Phase I period of performance. Limit this information to the number of trips, and purpose of each cost.

<u>Equipment</u>: Any equipment to be acquired for the effort. Breakdown the equipment into those items required for Phase I.

Other Costs: Any direct costs not included above. List the item, the estimated cost, and basis for the estimate.

Questions for Clarification

- Q1: Officials at the industry day said that they would "socialize" (i.e. market) the program in the coming months. Can you say how? Who is DARPA aiming at to market Walrus to? Congress? The services?
- A: DARPA has been and will continue to talk to Service officials about Walrus, to help identify broad operational tasks and system attributes. These design goals and capabilities are reflected in the solicitation. As the program proceeds, we will continue to work with the Services to ensure they fully understand the Walrus program and its value to the warfighter, so that DARPA can obtain Service support and buy-in for eventual transition of the program. This type of communication and interaction with the Services is a standard activity in all DARPA programs, and is what was meant by the term "socialize."
- **Q2:** Who/What are the transition service(s)?
- A: There has been wide early desk level Services' interest in this program and identifying the transition service(s) will be a Phase I activity.
- Q3: How have the services been involved in Walrus goal definition? Have they had a chance to comment on it? Have they articulated specific requirements?
- A: As we stated earlier, the Services have assisted in identifying notional operational tasks and key attributes for the Walrus air vehicle. It would be premature at this stage of the program to identify specific, formal requirements.
- **Q4:** Please clarify the requirement for survivability for the Objective Vehicle.
- A: There is no set requirement for survivability identified as yet. It is an attribute that is tradable in the Phase I studies. The OV will be required to fulfill its missions including the transportation of units from "Fort to Fight."
- Q5: Will the Figures of Merit (FOMs) be a single set applied across the program or will they differ by awardee? Should the costs associated with supporting their development be bid or will they be provided by DARPA?
- A: FOMs will be developed during the Phase I studies by DARPA in concert with industry and military/governmental teams. Notional provision should be made to support the activity.
- Q6: Please elaborate on DARPA's concept of buoyancy management.
- A: Walrus faces multiple challenges, not least it's very large-size. Key to the success of the program is the capability to control lift in all phases of flight and operations on the ground without requiring the use of off-board ballast (except surrounding air) this will call for a new and untried approaches and is central to the aim of achieving a transformational Walrus military utility. Buoyancy management, or more generally lift control, is unlikely to be accomplished by any single technology application. DARPA does not have a specific solution in mind but it is expected that a suite of various technologies, integrated to operate seamlessly as a total or fused lift control system will be required to achieve the goal.

Innovative system solutions may employ lighter-than-air gas, mixtures of gases, gas heating, cooling or pressurization, air vehicle body lift, wings and/or canards, vectoring jets or thrusters, ducted fans or propellers, water recovery of expended fuel, skin lift control devices, vacuum tanks and so on with various other technologies.

Q7: Can the Phase I primes have dialogue or share technical data?

A: Within the confines of the law, the Government does not object to having dialogues or sharing technical data.

Q8: Will the results of the QFD be made available to industry?

A: The results have been provided in the solicitation (see Appendix V). The primary attributes are listed along with a matrix describing the operational tasks and possible open trade-space. The operational tasks are listed in the order of their priority.

Q9: What is the envisioned size of the technology demonstrator? Is it a UAV/RPV or manned aircraft?

A: Phase II of the Walrus program is anticipated to include a number of hardware risk reduction demonstrations that, taken together, will underwrite and refine the conceptual designs of the Walrus objective vehicle. The ATD vehicle is one component of the demonstrations, albeit perhaps the largest. Walrus contractors will scope on-ATD demonstrations (including aspects such as sizing) taken together with other complementary off-ATD hardware demonstrations, to assure the validity and lowered risk associated with their concept designs.

Q10: What specific role could Walrus play in seabasing operations?

A: The principal operational task envisioned for a Walrus-type capability would be air-lift over global distances, but it may also support such missions as in-theater lift, sea basing and other missions requiring persistence. Sea basing can be described as power projection through phased at sea arrival and assembly, selective offload, and reconstitution at sea. See http://www.onr.navy.mil/sci_tech/special/353_exped/seabasing.asp for details on the sea basing concept. In a sea basing mission, Walrus would be expected to provide ship-to-shore, shore-to-ship, and ship-to-ship operations to include replenishment of ships within a sea base to constitute and regenerate forces. The specifics on sea basing, as well as other missions will be for the Services to determine as the program progresses.

Q11: The notional system concept is required one month after contract award. It was stated that it would describe how the NSC would provide military utility, how it would load and unload, etc. There are preliminary design attributes that won't be known until the Phase I trade studies have been completed.

A: The NSC review in the beginning of the program is a kickoff meeting to go into further detail than was possible in the proposal about your notional concept and will allow discussions and critique of your proposed NSC. The Government

expects that your NSC will address all pertinent design issues to an appropriate level of fidelity. The results of your trade studies will impact design and possibly concept, however, the initial NSC review will seek to understand your starting point, how you identified the major challenge areas, and any additional work you have completed on the concept since the award date.

Q12: What will the argument be? Does Walrus aim at complementing or replacing traditional airlift capabilities?

- A: The capability we envision for Walrus does not currently exist. Walrus will have global reach, be able to carry more than 500 tons of payload, at a competitive cost, operate without significant support infrastructure and from unimproved landing sites, and deploy composite units of personnel and their equipment so that the unit is ready to fight within 6 hours of disembarkation.
- Q13: I understand that you will pay out the \$10 million from FY-05 to finance the first phase (to compensate industry teams), correct? How much is going towards phase two? How much money has been appropriated to the project in FY-06?
- A: DARPA has not formally specified the anticipated value for Phase I or Phase 2 contracts and DARPA's detailed budget has not been released.
- Q14: Are Phase II funds committed and are they sufficient to complete the ATD vehicle and flight demonstration? Are Phase I funds available for projected award dates? What is the level of funding for the Phase I awards?
- A: DARPA has programmed the funding estimated to complete the program Phases I and II subject to successful completion of technical go/no-go milestones. It is anticipated that follow-on phases would be transitioned to the Services.
- Q15: Phase I is expected to end this June with the award of at least three contracts. Will these at least three industry teams then all begin to simultaneously construct a demonstration vehicle in phase 2? At the end of that phase, will one vehicle be chosen to go to the services, or will there be multiple vehicles that continue into phase 3?
- A: Actually, Phase I <u>starts</u> in June and anticipates the award of three contracts/agreements with the actual number of awards depending on the proposals that we receive. Phase I is a 12-month concept definition phase during which contractors will conduct trade studies to determine the conceptual design with maximum utility.

A minimum of one contractor will be chosen for Phase II, which will be a 36-month effort to develop a preliminary design of an objective Walrus vehicle, and conduct risk reduction demonstrations, including a scalable advanced technology demonstrator air vehicle.

At the close of Phase II, the Walrus transitions to the Military Services for refinement of the objective vehicle design and ultimate development of the objective vehicle. The Phase II scalable demonstrator vehicle may transition to the Services for their use in experimentation and assessment activities.

Q16: Please comment on the restrictions (if any) on foreign companies or foreign nationals participating in the Walrus program.

A: The restrictions on foreign involvement are levied by the International Traffic in Arms Regulations (ITAR). The Walrus program requires that all offerors comply with export control laws and ITAR regulations. It is anticipated that only US companies will be in a position to prime the Walrus contract, however, subject to ITAR compliance, foreign companies may choose to participate in Walrus teams as subcontractors. For more information on the ITAR, see http://www.pmdtc.org/reference.htm#ITAR.

Q17: Given that the Government intends to make an award based solely on an evaluation of the FAR proposals, how does an offeror make the Government aware that the OTA he believes they have a superior deal for the Government in terms of work to be accomplished and/or reduced?

A: Proposals will be selected for award negotiation based on their FAR-Based Technical and Cost volumes. Once this occurs, the OTA-Based Delta Proposal volume for each selected proposal will be reviewed. The offeror should make its case that its OTA bid offers mutual benefit to the Government and Offeror in its OTA-Based Delta Proposal volume. This case can be further supported during negotiations between the Offeror and the Government's contracts representative.

Q18: How will the program integrate companies with advanced systems already built into the program?

A: Through contractor teaming arrangements that bring together the best technical solutions to satisfy the needs of your proposed design concept.

Q19: Can companies who do not receive a Phase I award be considered for the Phase II effort?

A: The Government expects that only those companies involved in the performance of Phase I will be at a level mature enough to respond to the Phase 2 solicitation. In the event a company not involved in the first phase demonstrates a level of maturity comparable to the Phase I performers, they may be considered to enter the Phase 2 limited selection.

Q20: How does DARPA intend on paying contractors in Phase I?

A: Under an OTA contract, payments will be staged to the achievement of milestones. The payment amounts and milestones will be agreed in the OTA contract negotiations.

Q21: Is there an envisioned gap between Phase II and Phase III?

A: No gap is planned.

Q22: Will this program or any part of it ever be classified?

A: It is not anticipated that Phase I will have any classified elements. It is unknown but probable that there will be some classified elements in Phase II.

Q23: Will modular system-of-system solutions be considered?

A: DARPA is interested in all technical approaches that may satisfy the program goals as stated in the program solicitation and is further interested in funding a diverse set of technical approaches that possess solid military utility.

Q24: How much time will DARPA allow a winning contractor to start work on Phase I? Is there an allowable gap between the award date and any required start-up date?

A: A gap is not prohibited, but payment is based on technical progress and milestones, so delaying the start of your Phase I efforts will delay initial payments. If the schedule delays in the beginning of Phase I negatively impact the end schedule or quality of work at the completion of the Phase I Period of Performance, then the initial delay will negatively impact your response to the Phase II solicitation.

Q25: The solicitation indicates that Data Rights and IP can be passed to 3rd parties. How does this fit with the negotiation process for OT?

A: The Government will require data rights that allow it to enable third party vendors to develop technologies for insertion into the system (interface information etc). An example would be enough data to allow the independent development of a superior propulsion module to insert into the program. The Government also requires data rights adequate to allow independent verification of technical performance predictions and any test data developed under the program. Article IX of the Model Agreement (Appendix II) in the solicitation goes into greater detail about the Government's desires.

Q26: There is a 50 page limit on Volume 1 of the proposal. Is there some flexibility in the guidance provided for the individual sections of the volume (Section AI.3.1)?

A: The page limit guidance given for the individual sections are flexible, and given as guidance. Offerors should tailor the page numbers to fit their proposal.

Q27: What is the required level of detail for reporting commercial past performance?

A: The more detail given the better. §AI.2.1.5 describes the information requested to claim past performance. Commercial past performance should list the same or equivalent information.

Q28: How should a non-traditional contractor who does not have an approved CAS create the FAR based cost proposal? Should the costs be estimated as if they had an approved CAS?

A: Yes.

Q29: Is the Volume 3 delta proposal a stand alone proposal?

- A: No. Volume 3 is a delta proposal and should only indicate the changes from the FAR-based contract. It should include a summary. The volume should be submitted in a separate wrapped binder isolated from the FAR-Based volumes. The delta proposals will not be opened until the award selections have been made.
- Q30: Will Government Furnished Facilities (GFF) and Government Furnished Equipment (GFE) be accepted if proposed for use in Phase 2 if they are identified as available?
- A: Yes. GFF and GFE can be used to support the program, and the costs associated with their use will be added to the cost of the proposal in Phase II. Proposals should include the availability of any requested/required GFF.